

Tempe Fire Department Policies and Procedures
Hurst Tool
405.08
Rev 10-23-97

POWER UNIT MODEL JL-4GBS

Characteristics

Engine:	4 cycle, Briggs & Stratton or Tecumseh.
Size:	5 hp.
Fuel:	Unleaded gasoline, one-half gallon capacity. <u>Don't</u> mix with oil.
Weight:	61 lbs.
Lubricant:	SAE 30W motor oil, 21 oz. (1-1/4 pints) capacity.
Hydraulic Fluid:	Hurst hydraulic oil, six quart capacity.

Personnel Protection

The hydraulic oil used in this unit is a slight skin irritant, much like kerosene.

However, it is a SEVERE EYE IRRITANT. Wear full eye protection (goggles or SCBA facepiece-helmet faceshields are NOT approved) whenever unit is started and hydraulic oil is under pressure.

Never fill the fuel tank with the engine running or hot. When filling fuel tank, fill to within one-half (1/2") inch of top of the tank, to allow for expansion.

Starting Procedure

1. Move black by-pass valve to "dump" position (away from direction of flow).
2. Move throttle lever to start ("choke") position.
3. Pull starter cord until engine starts.
4. Move throttle lever to run position.
5. Connect the couplings from the tool to the Bruning couplings from the power unit.
6. Move black by-pass valve to "pressure" position (toward direction of flow).
7. Tool is now ready to operate.

Shut Down Procedure

1. Move throttle lever to stop position.
2. Move black by-pass valve to "dump" position (away from direction of flow).
3. Disconnect couplings from power unit to tool.

4. Re-connect couplings in the stored position.

Caution: When disconnecting couplings, be aware that there may be a small spurt of hydraulic oil.

When connecting or disconnecting couplings, keep them free from dust or dirt.

Note: If couplings must be disconnected prior to engine shut-down (changing tools for example) position the black by-pass valve to the "dump" position (away from the direction of flow). This will relieve the pressure in the hydraulic lines.

If some pressure remains in the hose and connection cannot be made, place a rag around the male end and strike against a hard surface. This will release the pressure at the nipple valve and the rag will protect it and limit fluid spray.

"JAWS" MODEL JL-32B

Characteristics

Weight:	70 lbs.
Opening Distance:	32 inches.
Spreading Force:	18,000 lbs.
Closing Force:	18,800 lbs.

Operation of Thumb Control

Move the thumb controls to the left to open or spread the arms of the tool. If the controls do not operate the arms in this manner, the hoses have been connected incorrectly on either the tool or the power unit. Check the color coding on both and correct. (Turn by-pass valve on the power unit "OFF" before breaking hose connections).

Attaching Chain Shackles

Use the top hole in the pre-attached automotive tips. Secure by use of the long retaining pin.

Using the Chains

Make sure both hooks are facing the same direction, up or down. Attach the chains from the same direction (side) to prevent the arms from twisting.

Caution: Don't allow anyone (other than victim[s]) to be "in-line" with a chain when under tension.

CUTTER MODEL #JL-150

Characteristics

Weight:	36 lbs.
Length:	32 inches.
Cutting Force (at blade center):	25,000 lbs.

Cutting Force (at notch): 70,000 lbs.

Maximum Opening at Tip: 7.25 inches.

Operation of Thumb Control

Similar to the "Jaws."

Caution: After using this tool ALWAYS inspect the cutting blades for any nicks or cracks. Damage should be reported to the Senior Fire Mechanic for evaluation.

RAM MODEL JL-60B

Characteristics

Weight:	41 lbs.
Length Closed:	35 inches.
Length Open:	60 inches.
Opening Force:	15,000 lbs.
Closing Force:	6,000 lbs.

RAM MODEL JL-30B

Characteristics

Weight:	27 lbs. 4 oz.
Length Closed:	22 1/4"
Length Open:	36"
Opening Force:	15,000 lbs.
Closing Force:	6,000 lbs.

Operation of Twist Grip

Twist grip to left or right to open or close as shown on label on the tool.

Attaching Chain Shackles

Slide shackle clips over holes in end pieces. Secure by use of the long retaining pin.

Using the Chain

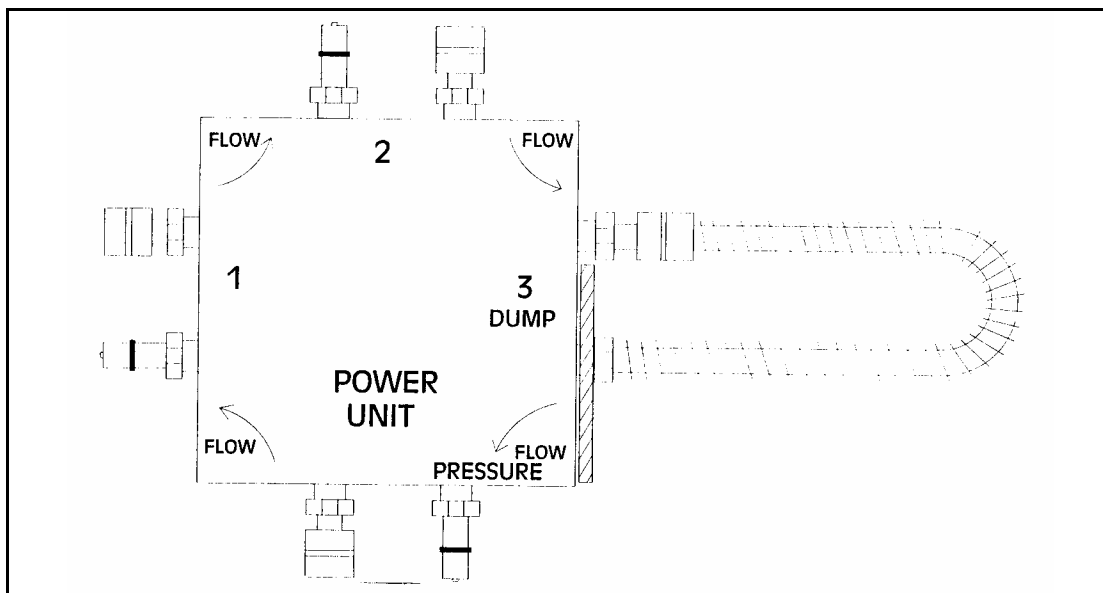
Make sure both hooks are facing the same direction, up or down. Attach the chains from the same direction (side) to prevent the arms from twisting.

Caution: Don't allow anyone (other than victim[s]) to be "in-line" with a chain when under tension.

MANIFOLD

The HURST manifold allows you to connect 2 or 3 tools to the power generator at the same time. It is square shaped and has a male and female connection on each of the four sides; one set of connections for the power unit and three for tools. The unit operates with all connections in series or a looped system so, all the connections have to be attached for the hydraulic fluid to flow. There is a jumper hose across one set of connections (2 on L271) that allows you to connect less tools and still keep the system looped. There is a dump valve on the manifold similar to the one on the power unit.

Remember it is possible to use 2 or 3 tools at the same time, however, the speed of tool operation is reduced proportionally by the number of tools in use (the same amount of fluid operating more than one tool). It is usually faster to finish with one tool and then set it down and use the other rather than try to use them both at the same time. The advantage is having all the tools connected rather than have to disconnect one tool and connect another.



Manifold